

## NEW DESCRIPTIONS

### A NEW SPECIES OF GENUS *ERISTALIS* LATREILLE (SYRPHIDAE: DIPTERA)<sup>1</sup>

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(With seven text-figures)

#### INTRODUCTION

There did not exist any significant contribution on the systematics of Indian Syrphidae until the publication of FAUNA OF BRITISH INDIA by Brunetti (1923). He (1923) described about 267 species from the Indian subcontinent. Subsequently, Blair (1948), Coe (1964), Nayar (1967a, 1967b) and Ghorpade (1981) added a few more species to the syrphid fauna of the Indian subcontinent. A study of the syrphid fauna of North-West India was taken up and this paper describes a new species.

#### *Eristalis yamunanagarensis* sp. nov.

##### MALE.

*Head*: face yellow with concolorous tomentum and silvery white hair, raised centrally into a black knob; clypeus black; mouth opening bottle-shaped, proboscis black; genae yellow with concolorous hair, post genae with silvery white tomentum; frons yellow with concolorous tomentum and yellow hair; antennae fulvus, arista orange coloured, bare; eyes brown, with four incomplete stripes that are broad above and narrow below (Fig. 2), hardly dichoptic; vertical triangle black, ocelli grey; vertex yellow with concolorous hair.

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*Thorax*: yellow covered with concolorous hair, with four distinct black incomplete longitudinal stripes; mesopleurae and sternopleurae yellow, rest of pleurae grey, all covered with yellow hair; scutellum black anteriorly and brown posteriorly, covered with yellow hair.

*Leg*: yellow with concolorous hair, hind femorae slightly swollen and with incomplete black horizontal and complete black vertical band (Fig. 1), the under surface of hind tibiae toothed (Fig. 1).

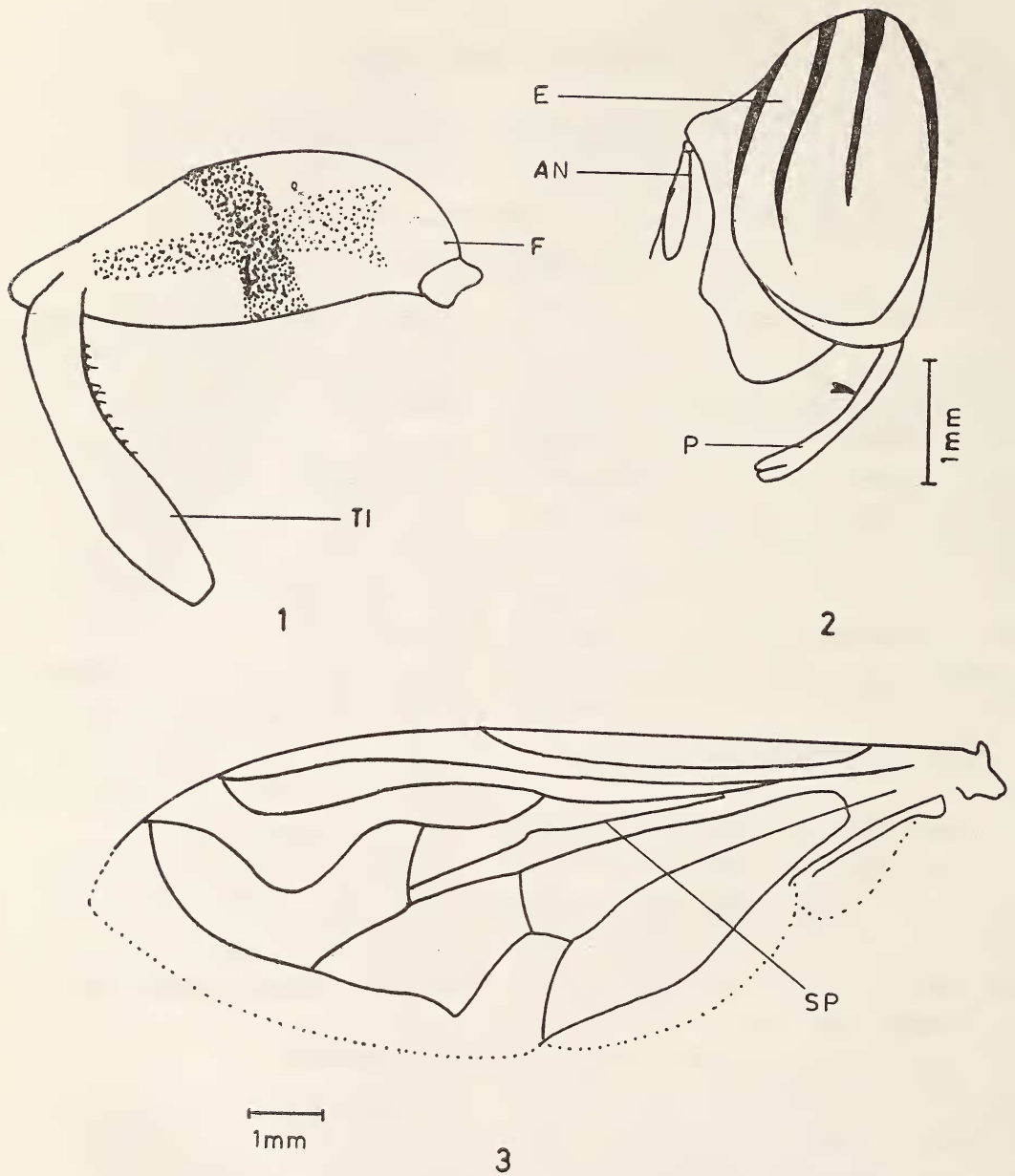
*Wing* (Fig. 3): smoky, bare, stigma yellowish black, vein  $R_{4+5}$  distinctly looped into first posterior cell, spurious vein barely touches the anterior cross vein; anterior alulae small, posterior large, both with a fringe of silvery white hair; halteres yellow.

*Abdomen*: covered with yellow hair, first segment grey, second segment with black cephalad margin and with a brown spot in the middle, third and fourth segments brown and both with a yellow cephalad band.

##### MALE TERMINALIA

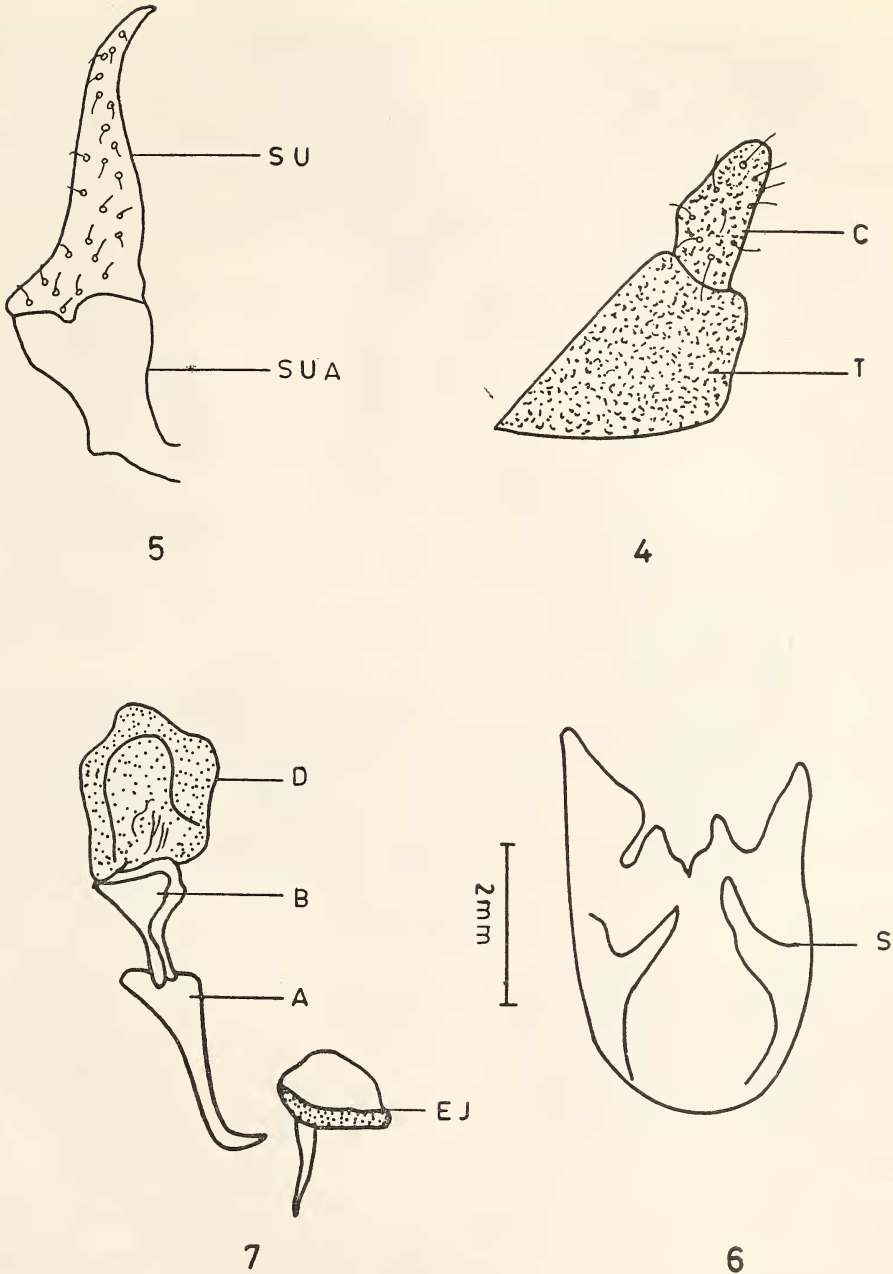
*Periphallid organs*: ninth tergite pubescent (Fig. 4); cerci roughly triangular, densely pubescent and bear long hair (Fig. 4); surstyli roughly triangular (Fig. 5); surstyler apodemes U-shaped.

*Phallic organs*: sternite round anteriorly (Fig. 6), with two process and a cup like



Figs. 1-3. *Eristalis yamunanagarensis* sp. nov.  
1. Hind femora and tibia; 2. Head in profile; 3. Wing.  
Abbreviations: AN, Antenna; E, Eye; F, Femora; P, Proboscis; SP, Spurious vein;  
TI, Tibia.

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Figs. 4-7. *Eristalis yamunanagarensis* sp. nov.

4. Cercus and part of tergite (9th); 5. Surstyle and a part of surstylar apodeme;

6. Sternite (9th); 7. Aedeagus and ejaculatory apodeme.

Abbreviations: A, Aedeagal apodeme; B, Basal aedeagus; C, Cercus; D, Distal aedeagus; EJ, Ejaculatory apodeme; S, Sternite (9th); SU, Surstyle; SUA, Surstylar apodeme; T, Tergite.

depression posteriorly; aedeagal apodeme Y-shaped (Fig. 7); basal aedeagus formed of two Y-shaped plates (Fig. 7); distal aedeagus roughly a squarish plate (Fig. 7); ejaculatory apodeme mushroom-shaped (Fig. 7).

Length of body 7.5 mm (devoid of antennae), length of wing 6.7 mm.

FEMALE: Unknown.

*Holotype*: Adult ♂ from Yamunanagar (Haryana) from wild vegetation, 12.xi.1983. Coll. V. Gupta.

*Paratypes*: 2 ♂♂, same data as holotype. Types in Entomology Section, Department of

Zoology, Panjab University, Chandigarh.

*Remarks*: This species superficially resembles *Eristalis quinquelineatus* Fabricius, but differs from it in having no longitudinal stripes on the face; eyes having four stripes in place of six; legs yellow rather than grey and having two bands on femora.

#### ACKNOWLEDGEMENT

We thank the Chairman, Department of Zoology, Panjab University, Chandigarh for providing necessary research facilities.

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### NEW SPECIES OF *RICCIA* - *RICCIA INDIRA-GANDHIENSIS* SP. NOV.<sup>1</sup>

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(With six text-figures)

The genus *Riccia*, has attracted attention of bryologists on account of its controversial position in the evolution of bryophytes. A comprehensive account of it is given by Stephani (1900, 1910-1924) and Jones 1952, 1957). Indian species have been described by Kashyap (1916), Pande (1924), Chopra (1938), Ahmad (1942), Shrivastava (1964)

and Ram Udar (1956, 1961, 1978). Stephani (1910) recognized 130 species whereas Reimers (1916) recognized nearly 200 species throughout the world. It is the commonest liverwort in India having about 40 species including 11 species from Western Himalaya, 12 species from Eastern Himalaya, 16 species from Central India, 11 species from South India and 5 species from Western India (Dabhade 1975, 1985).

The 5 species of *Riccia* from Western India recorded by Dabhade (1975, 1985) are *R. discolor* L. et L., *R. billarderi* Mont. et N.,

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